IN THE CLAIMS

Please amend the claims as follows:

1. (Original) An apparatus for testing an integrated circuit (10), the apparatus comprising:

- a compactor (22) to compress test responses from a circuit-under-test (14) that is part of an integrated circuit 10; and

- masking circuitry (18) coupled between the circuit-under-test and the compactor (22) for masking one or more of the test responses from the circuit-under-test (14), characterized in that the masking circuitry (18) further comprises decompression circuitry (26, 30, 36, 38) for receiving compressed mask data (m_1-m_q) from the apparatus and providing decompressed mask data to the mask circuitry (40).

2. (Original) An apparatus as claimed in claim 1 wherein decompression is performed by a linear-feedback shift register (26).

3. (Currently amended) An apparatus as claimed in ~~any of the preceding claims~~claim 1 wherein decompression is performed by phase shifter (30).

4. (Currently amended) An apparatus as claimed in ~~any of the preceding claims~~claim 1 wherein decompression is performed by weighting logic.

5. (Currently amended) An apparatus as claimed in ~~any of the~~ ~~preceding claims~~claim 1 wherein, the compressed mask data comprises at least one control signal for controlling the masking circuitry (18).

6. (Original) An apparatus as claimed in claim 5 wherein, the at least one control signal is a mask all control signal.

7. (Original) An apparatus as claimed in claim 5 wherein, the at least one control signal is a mask enable control signal.

8. (Original) A method used in the testing of an integrated circuit (10), characterized by comprising the steps of:
-       providing compressed mask data to decompression circuitry;
-       decompressing the compressed mask data to produce decompressed mask data; and
-       masking test responses from the integrated circuit (10) in response to the decompressed mask data.

9. (Original) A method for computing compressed mask data for use in masking test data from an integrated circuit (10), characterized in that it comprises the steps of:
-       generating a set of equations associated with the mask data; and
-       solving the equations to obtain compressed mask data.